Fall 2018

Imitation & Dissimulation

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Imitation & Dissimulation

Thesis Prep 2018

Imitation and dissimulation are the two key terms in my design exploration. In the scope of material, imitation is the method, which all the schemes are started from imitating the existing; and dissimulation was the subject that I tried to define in term of its affiliation and possibility in architecture.

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INTRODUCTION
IMITATION & SKEUOMORPHISM

Imitation plays a fundamental role in cultural development, and it's an instinct that human-being born with. Because of its fundamentality, forms of imitation are infiltrated in many fields, including the art and design industries. For example, philosophers have used the term, mimesis, to discuss the criticality of imitation in art and literature. Theories of imitation and mimesis have been addressed in an academical manner since ancient Greece, however; imitation is also something we encounter on a daily basis. In the field of user interface design, designers use the term, Skeuomorphism, to represent the type of design methods of making items resemble their real-world counterpart.

Many people today use smartphone. When using smartphone to take pictures, one will hear the mechanical shutter of traditional camera that signifies the image has just been taken. Moreover, in I-phone operating system before IOS 7, Apple uses the button-like graphic icon for apps to resemble the protrusion of the physical button, even though they are the one that introduced the revolutionary button-free flat screen.

There are also examples of imitation in the physical design industries, like the "Woodie" station wagon that was once very popular in the United States in the mid-20s. Car manufacturers use wood compartments to resemble the look of the horse-drawn carriage. Later, the manufacturer had started to produce fake wood segments (steel with woodgrain decoration) as an option for consumers, which is a skeuomorph of a skeuomorph.

Packard Station Sedan, 1949


Ford LTD Country Squire, 1968

INTRODUCTION
DISSIMULATION & EXPRESSION

"The opposition of artworks to domination is mimesis of domination. They must assimilate themselves to the comportment of domination to produce something qualitatively distinct from the world of domination."
- Theodor W. Adorno, "*Aesthetic Theory.*"

Unlike design industries use imitation to provoke the sense of familiarity to get costumers master the function or appreciate the products they produced; With less influence on consumerism, art, such as painting, drama, and literature, use imitation to create counter-world of reality.

Imitation sometime carries negative meanings, but according to Ákos Moravánszky discussed in his book "Metamorphism," art is one of the few areas that are expected imitation in its creation. Art needs to imitate the reality to either highlighting or denying what is being portrayed. In modern art, the criticality of artwork sometime can't be appreciated merely of what is on the "canvas," since the "true expression" is hidden behind. In this kind of art, the surface is a layer of dissimulation, and dissimulation is a type of expression.

Last but not least, imitation is the premise of a convincing dissimulation. To conceal the truth, one must imitate something else to dissimulate the subject that means to be hidden.

Cambell's Soup Cans, Andy Warhol, 1962

The Treachery of Images, Rene Magritte, 1928-29

TIMELINE

MATERIAL

ARCHITECTURE

THEORY

TIMELINE
MATERIAL

The material is a fundamental component in the development of architecture. Since the beginning of human history, architectural materials and construction methods have been a crucial factor in the architect's expression.

Pyramids of Giza, 2550-2490 BCE

9000 BCE

Brick

The earliest discovered construction material is sun-baked clay brick.

8500 BCE

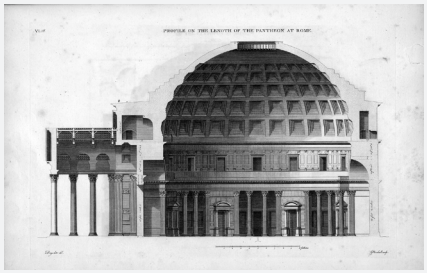
Timber

The evidence of wooden hut unearthed in England by archaeologists in 2010.

3100 BCE

Granite, Limestone

Ancient Egyptians were one of the first civilizations to build architectural structures in stone.



Section of Pantheon

Parthenon, 432 BCE

Pantheon, 113-125

650 BCE

20

100

Marble

Ancient Greek started to build their temple in stone instead of timber. Originally, marble was the locally available choice; however, marble became the "symbol" of Roman Architecture.

Concrete

Roman first used concrete in their monumental structure. The type of concrete is called hydraulic cement-based concrete today.

Glass

Glass first appeared in Roman-era Egypt. The manufacturing of glass was substantially improved in the 12th and 13th centuries, and it became an essential material in all Gothic Cathedral.

The Iron Bridge, 1779

700

Iron

A first known example of iron used as a primary structural material was in China when the Tang Dynasty constructed a number of cast-iron pagodas.

1775

Iron (reinvented)

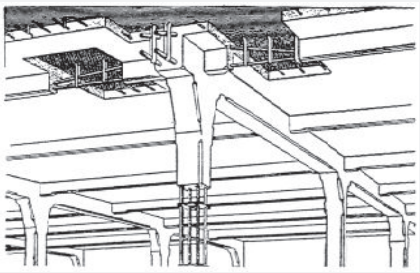
After iron was forgotten as a construction material for almost 1000 years, it was rediscovered as a construction material when it used to build the Iron Bridge in England.

1854

Engineered Timber

Engineered Timber was first used in the Church of St Luke in Formby, England.

Brooklyn Bridge, 1883



François Hennebique System

1890

Steel

Henry Bessemer invented Steel-making process in 1855, and the material was used in construction around 1890. Steel began to replace iron in the following years.

1892

Reinforced Concrete

François Hennebique was a pioneering of reinforced concrete construction system, and he patented his reinforced-concrete system in 1892.

1926

PVC

The 20th century was a massive boom in the production of plastics. For example, PVC was often used in building finishes.

Glass House, 1949

German Pavilion, Expo '67

1959

1967

Float Glass

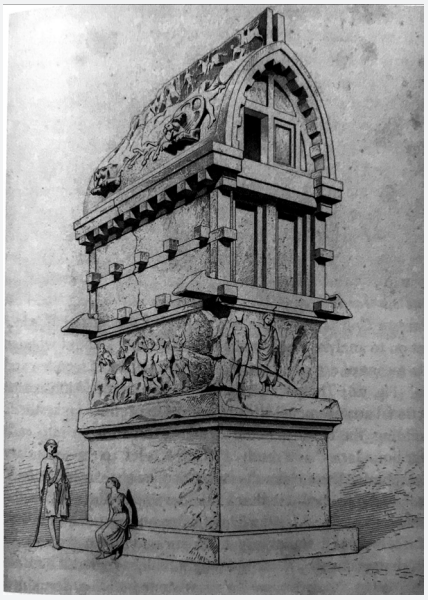
Float glass is made by floating molten glass on a bed of molten metal. It was not widely used until 1959 when Sir Alastair Pilkington found a way to industrialize it.

Plastic Tensile Structure

The tensile structure became widespread in large structures after the mid 20th century. The plastic membrane was used in the design of the German Pavilion by Frei Otto.

TIMELINE
ARCHITECTURE

In the history of architecture, materials, such as iron and steel, emerged due to the advancement of industry, were applied to building using traditional construction methods that were developed for conventional materials at the time, like stone and timber.

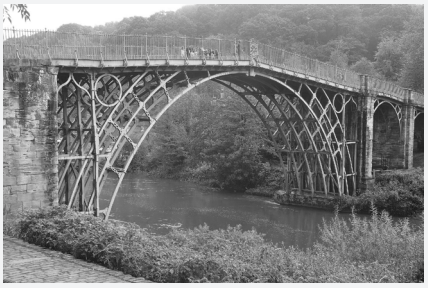


375-360 BCE

Tomb of Payava
Xanthos, Lycia
Timber to Stone

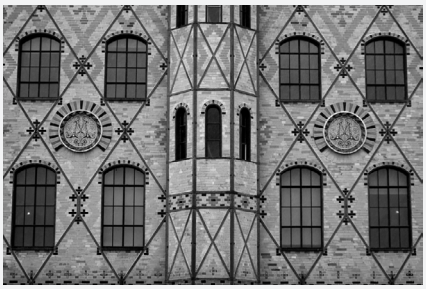
13-9 BCE

Ara Pacis
Rome
Timber to Stone



1779

The Iron Bridge
England, Thomas Farnolls Pritchard
Carpentry to Iron Joint

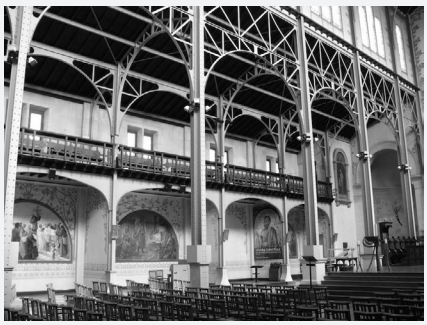


1872

Menier Chocolate Factory
Noisiel, France, Jules Saulnier
Timber Truss to Iron Truss

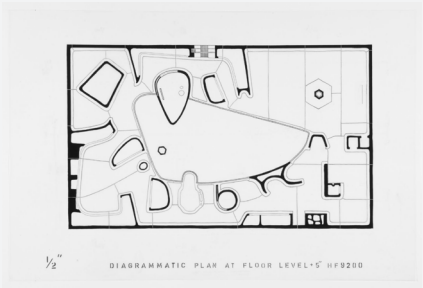
1875

Bibliotheque National
Paris, Henri Labrouste
Stone (Gothic vaulting) to Steel



1901

Notre-Dame-du-Travail
Jules Astruc
Masonry to Steel & Iron



1923

Tokyo Imperial Hotel
Frank Llyod Wright
Timber to Brick & Concrete

1930

Haus Lange&Haus Esters
Germany, Mies Van Der Rohe
Steel + Masonry

1956

House of the Future
Alison+Peter Smithson
Plywood + Plastic (Plaster + Emulsion Paint)

1958

Kagawa Prefectural Government office

Kenzo Tange

Timber to Concrete

1970

Garden building of Sy Hilda's College

Alison+Peter Smithson

Masonry + Concrete & Wood

2014

Le Corbusier's Maison Domino (Timber)

Valentin Bontifes van Beek

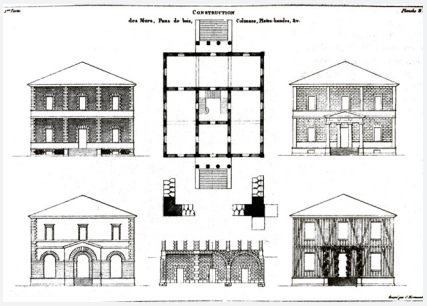
Reinforced Concrete to Engineered Timber

TIMELINE
THEORY

The earliest discussion of imitation is written by Vitruvius in "Ten books of architecture," where he discussed the ontology of decorative detail in stone and marble is the imitation of structural logic of carpentry.

Starting from late 18 century, transformation of materiality, often time a form of imitation when one material imitating the others, was discussed by many architects, such as Gottfried Semper, who theorized the ontology of architecture in 4 material categories and it corresponds techniques; at the same time, imitation was criticized by many in term of dissimulation, meaning the load-bearing material is hidden behind a different material.

Some architects who in favor of the idea, "truth to material," advocate the importance of craftsmanship, and design façade with rough masonry to emphasize the nature and presence of materiality.



Same building in various versions of material

15-30

Ten Book of Architecture
Vitruvius

The ontology of decorative detail in stone and marble is came from the structural logic of carpentry.

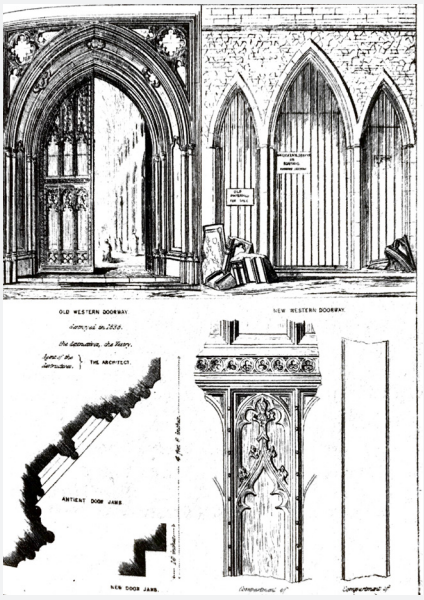
1784

"Truth to Material"
Carlo Lodoli's Conclusion, Quoted by Francesco Algarotti

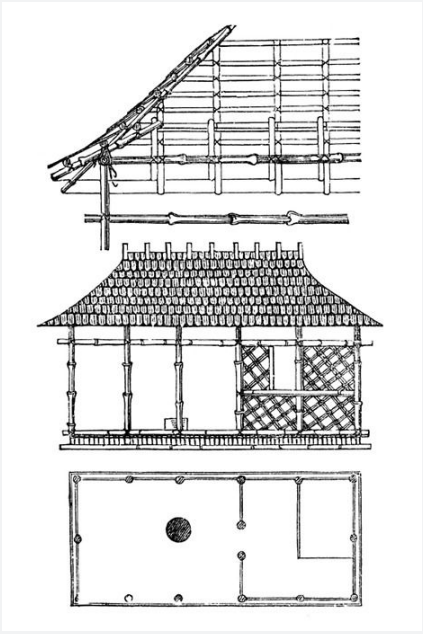
The relationship between structure and surface became an issue of architectural morality.

1819

Precis of the Lecture on Architecture
Jean-Nicolas-Louis Durand



Comparison between the old and new doorways and details of the church of St Mary Overie



The Caribbean hut at the Great Exhibition of 1851. Drawing by Gottfried Semper

1841

Contrasts

Augustus Welby Pugin (1812-1852)

Comparison between the old and new western doorways and details of the Church of St Mary Overie

1849

The Seven Lamps of Architecture

John Ruskin (1819-1900)

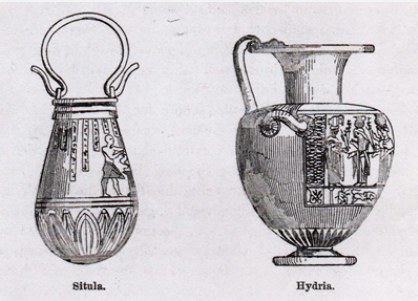
Deceits are a result of the simulation of false construction.

1851

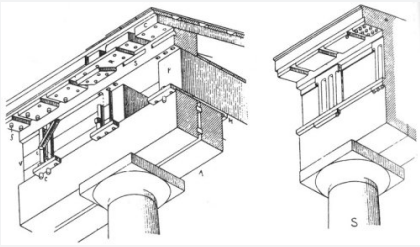
The Four Elements of Architecture

Gottfried Semper (1803-1879)

Four Material Categories & four primitive Technique Textile, Ceramics, Tectonics (Carpentry), & Stereotomy



Situla and Hydria


The material transformation of the wooden temple.

1860

Style
Gottfried Semper

The theory of Stoffwechsel, metabolism.

1899

Historie de l'Architecture
Auguste Choisy (1841-1909)

"Petrification" of wooden architecture.

1870

Aesthetic Theory
Theodor W. Adorno (1903-1969)

"The opposition of artworks to domination is mimesis of domination."

DESIGN EXPLORATIONS

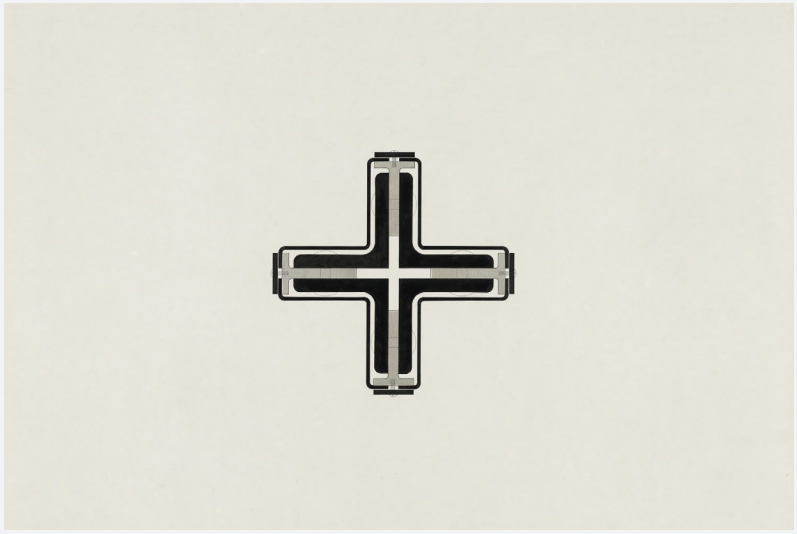
MUTATION

SYNONYMS

MUTATION
MATERIAL TRANSFORMATION OF MIES COLUMN

The series of column mutations are manipulations between appearance and substance. Through historical and cultural influence, both building and material itself have embedded stereotypical meanings. Especially in epic architectural-pieces that designed by world-renowned architects such as, Maison Domino, Villa Savoye, and Barcelona pavilion, these physical entities have been transcended to specific terminologies in architect's dictionary. Through the material transformation of one of the most iconic columns in the discipline of architecture, the exercises aim to explore new qualities and meanings from the permanent monument.

Barcelona Pavilion, Barcelona, Spain, Ludwing Mies van der Rohe



Horizontal column section, Ludwig Mies van der Rohe, 1929

MARBLE

GOLD

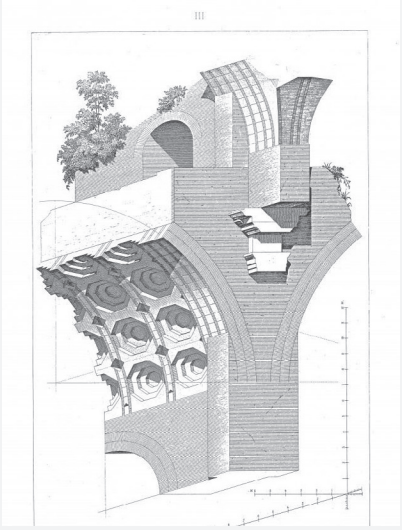
RUSTED

FUZZY

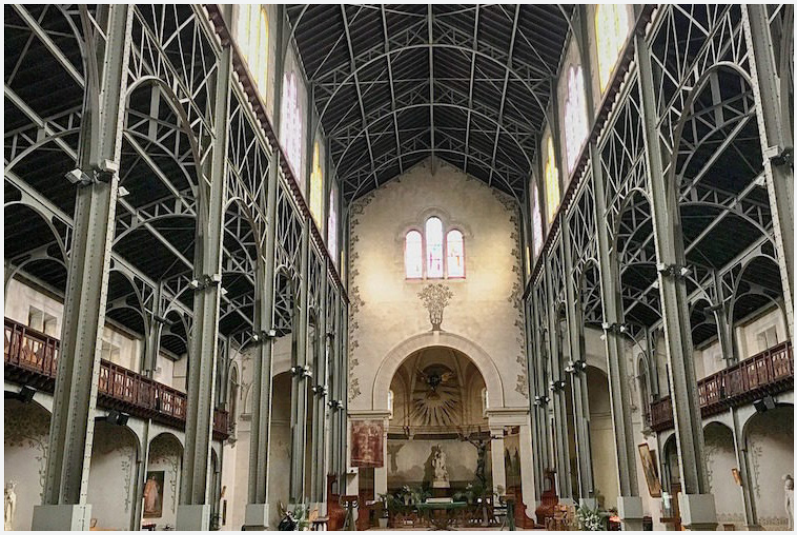
SYNONYMS
MASSIVENESS & DENSENESS

This sets of drawings are attempts that visualize the idea of imitation using material language that I have studied. Each collection has two levels of imitation. The first level is the imitation of pre-existing architecture in term of formal and material expression. The second level is self-imitation, which is the cross-referencing between the materials that are introduced in each drawing.

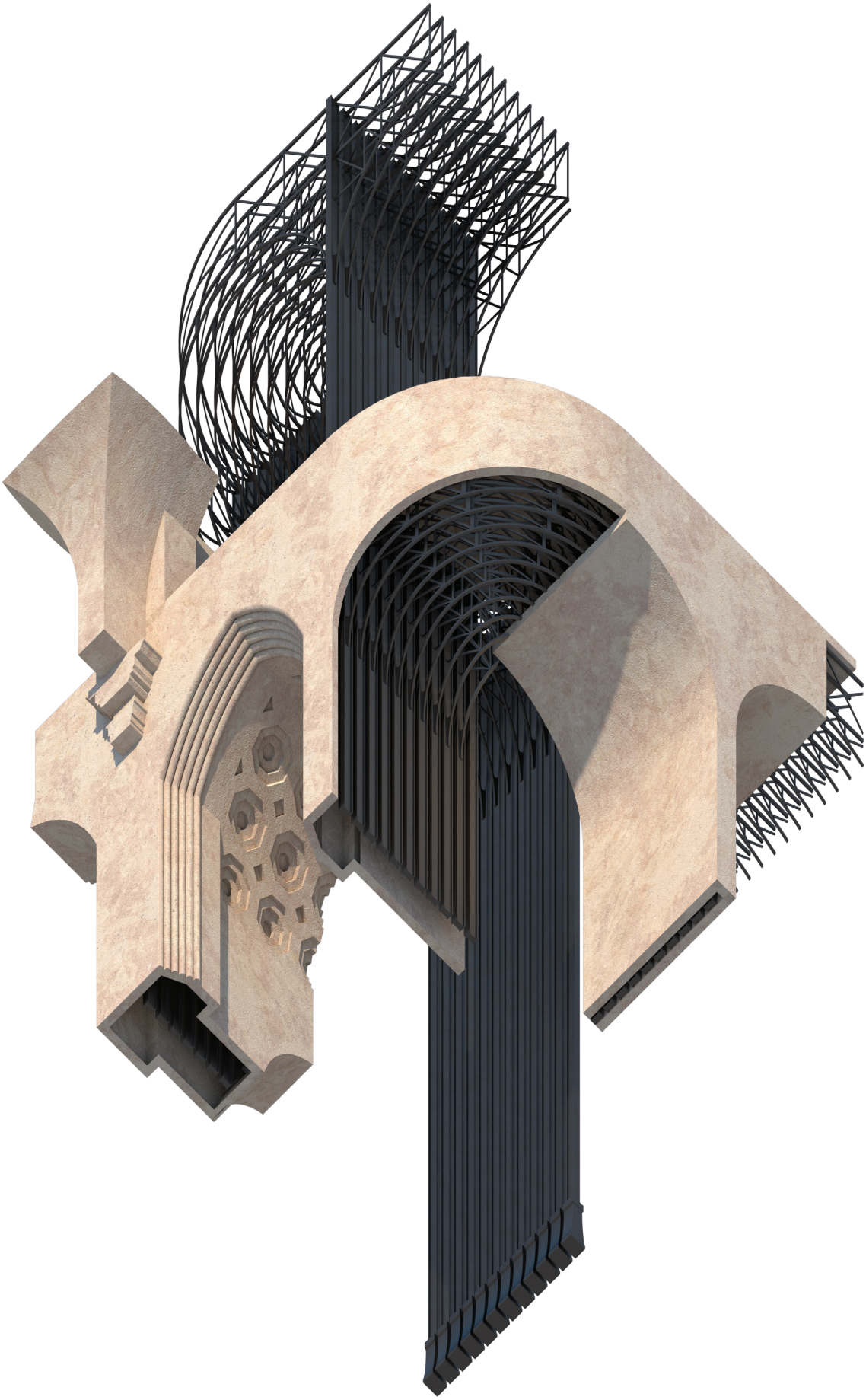
The drawings illustrate the aggregation of slender steel trusses that imitate the massiveness of classical marble "arch," and through formal imitation, a different language is generated and redeploy for further manipulation. These drawings refer to the work by Choisy, the "Basilica of Constantine," and the church by Jules Astruc, "Notre-Dame-du-Travail" a building with traditional masonry façade, and steel and iron structure that follow classical typology.

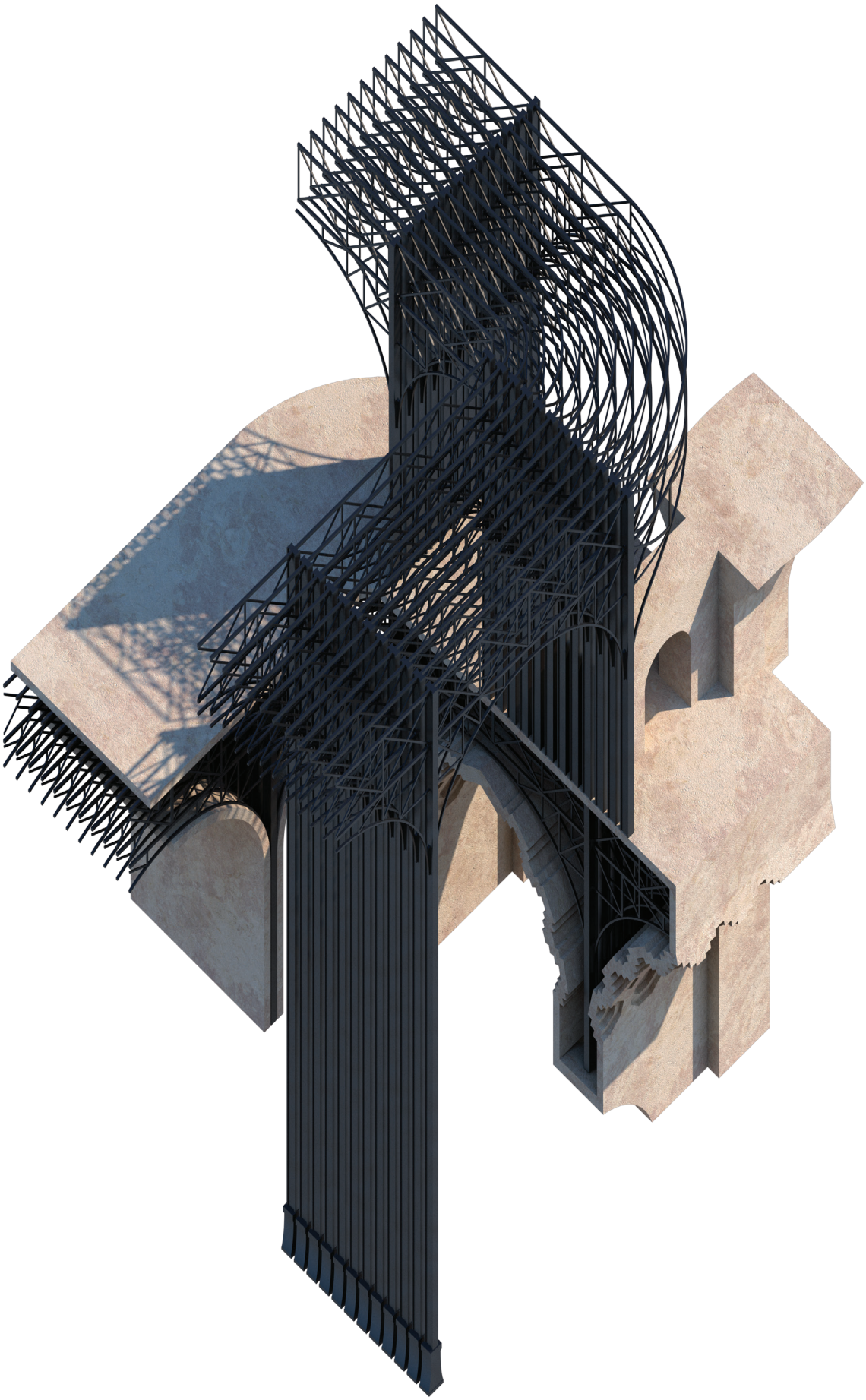


L'art de batir chez les Romains, Auguste Choisy, 1873



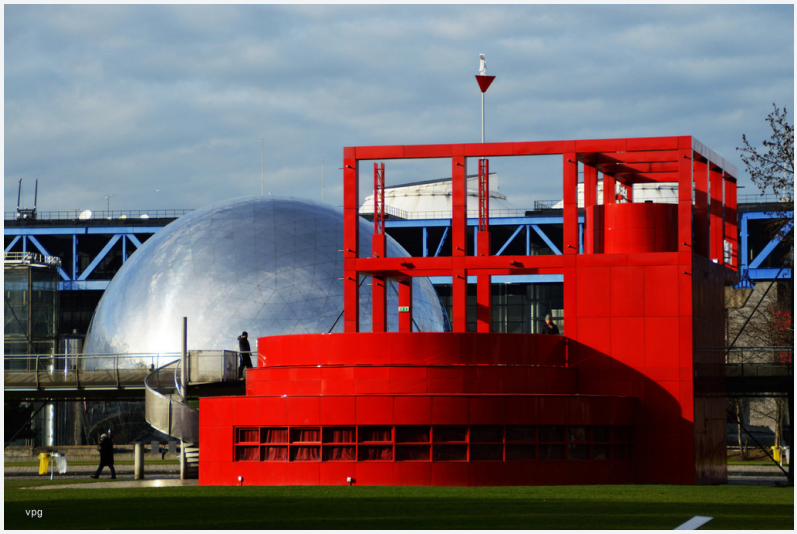
Notre-Dame-du-Travail, Paris, Jules Astruc, 1899-1901





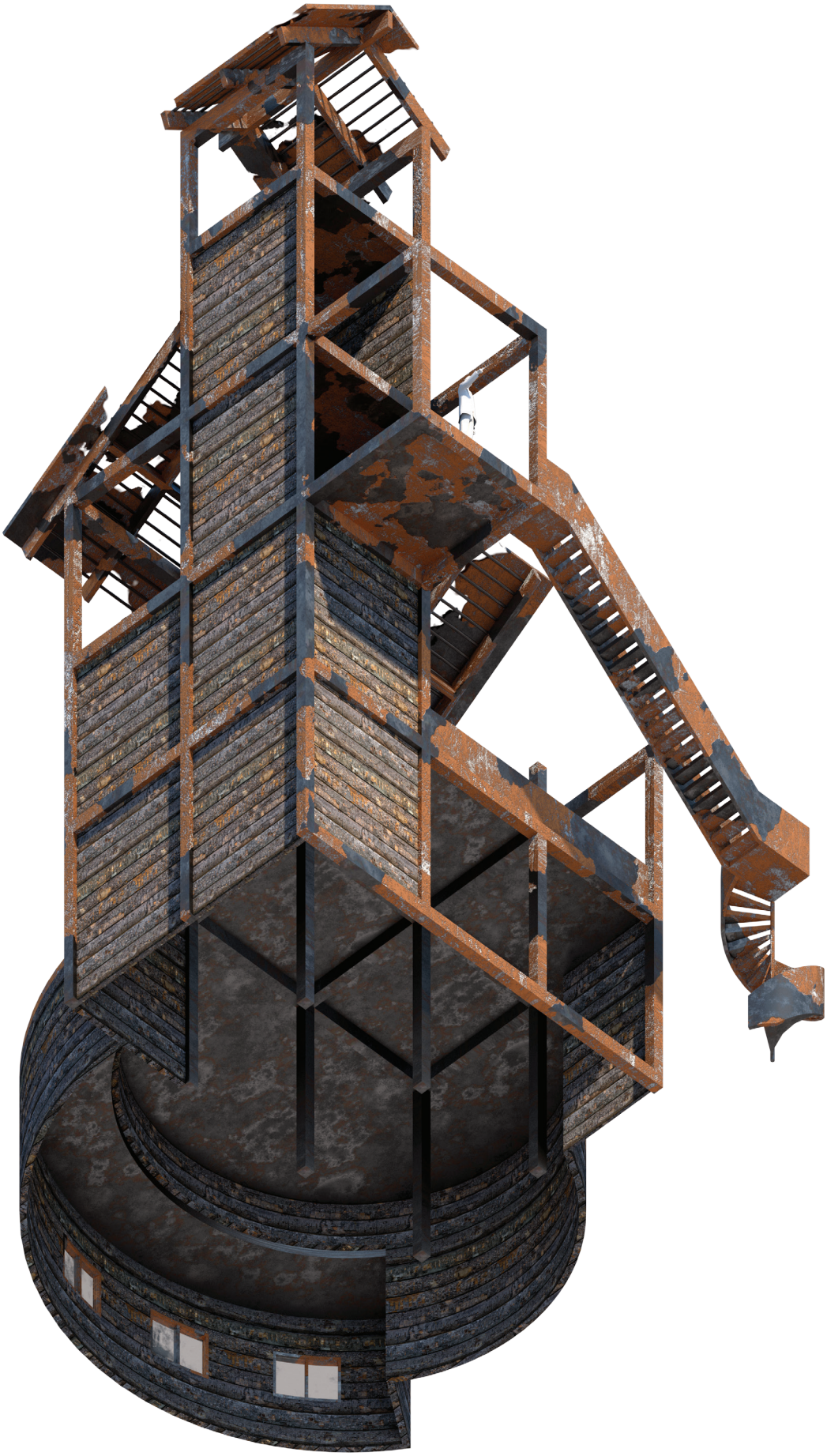
SYNONYMS
RUSTED & ROUGH

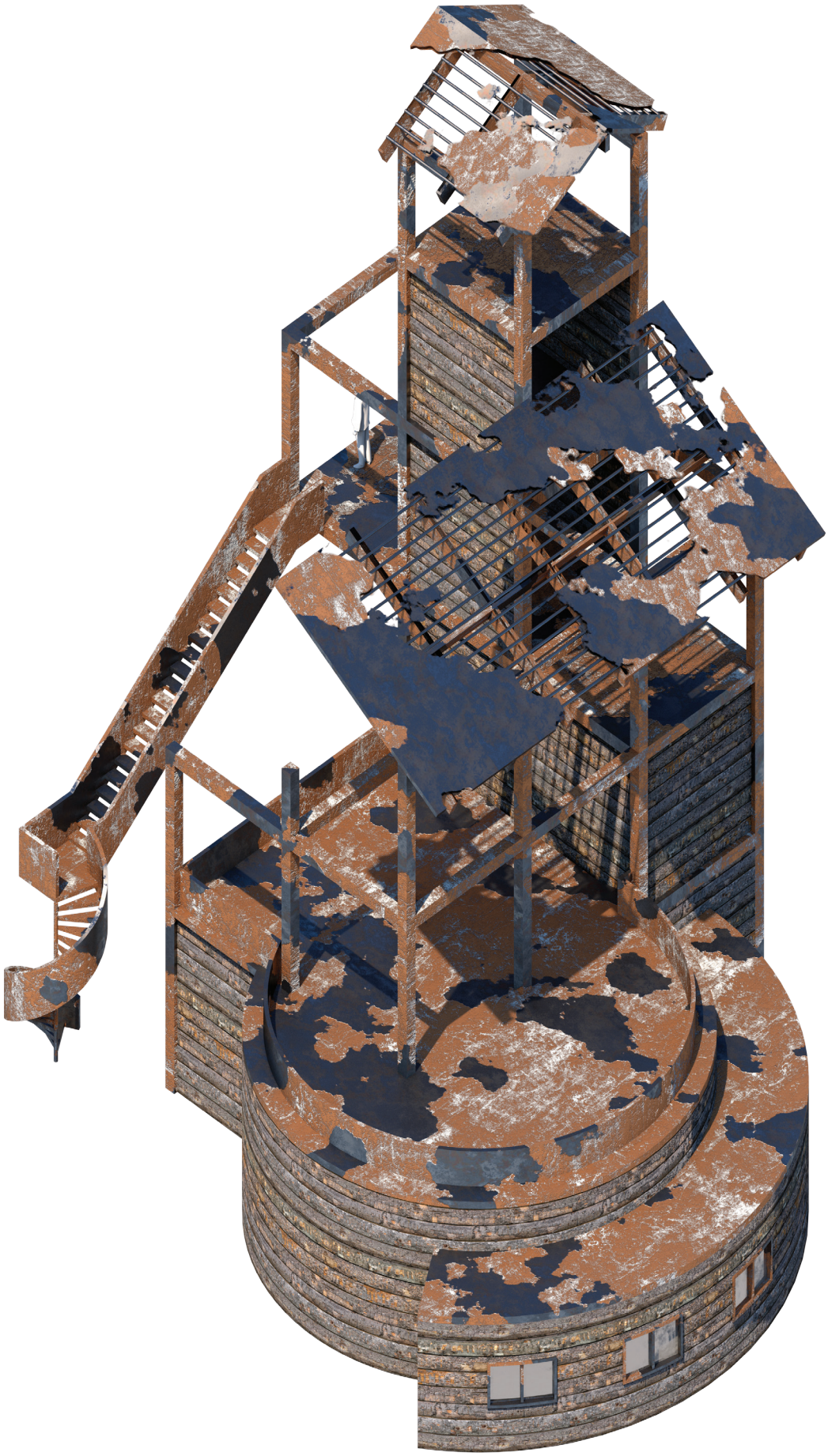
This set of drawings aims to create a contradiction of Bernard Schumi's follies, which are a series of structures that are superimposed on the site and claim no relationship with the immediate context and historical reference. So, in the drawings, I transferred the clean surface to wood and introduced traditional architecture element, gable roof, to express the primitiveness and its connection of existing typology. The imitation of rusted effect serves as a layer of dissimulation, telling the structure is not something new and suggests the sense of context even though it's not existing. For this drawing, I also look at the early Bauhaus building, Sommerfeld House, which has entirely different materiality that the later Bauhaus projects.



Parc de la Villette, Paris, Bernard Schumi, 1982-98

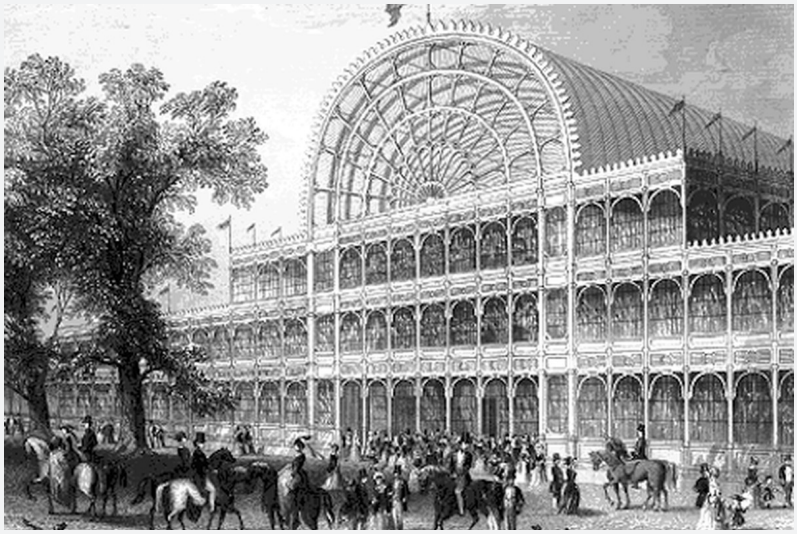
Sommerfeld House, Berlin, Walter Gropius, Adolf Meyer, 1920-21





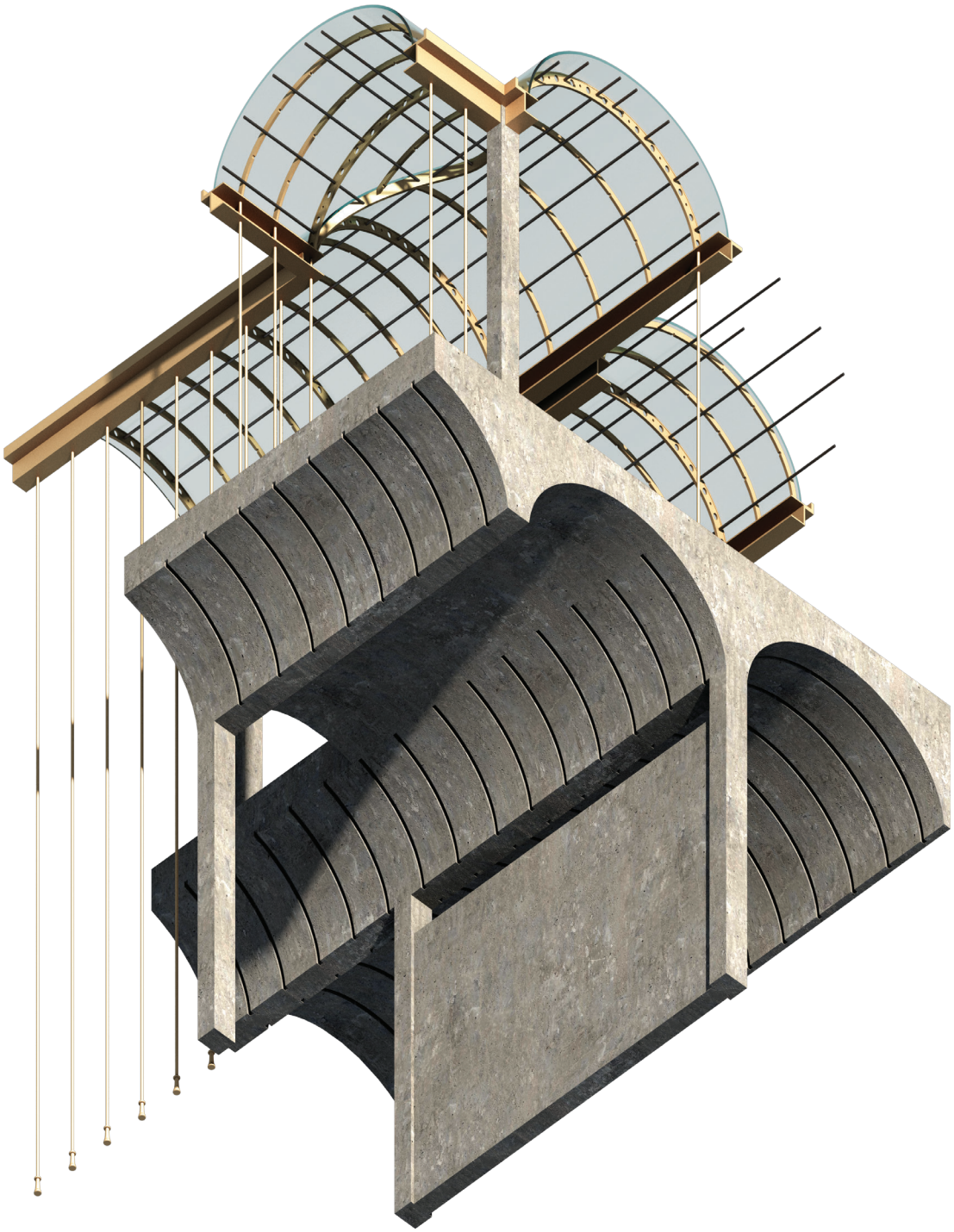
SYNONYMS
MOLDING & CASTING

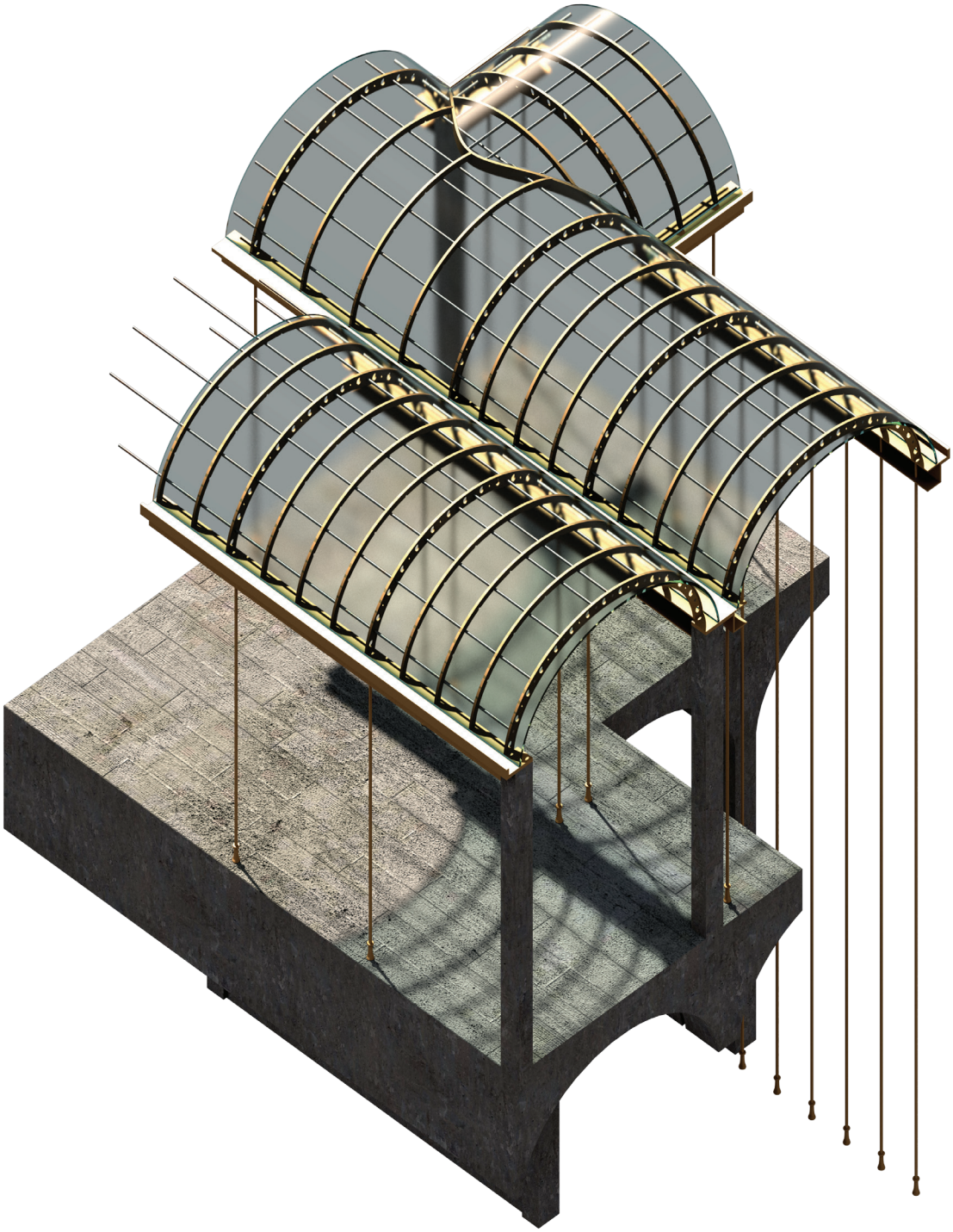
The drawings refer to Crystal Palace and Kimbell Art Museum, which have similarity informal language and program, while their materiality is entirely different. The design intends to bridge the two distinct structure with a decorative motif, which is manifested in the concave texture that follows the same rhythm of the trusses.



The Crystal Palace, London, Joseph Paxton, 1851

Kimbell Art Museum, Texas, Louis Kahn, 1972





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